

METALS and ALLOYS

Volume XIV—July, 1941 to December, 1941

SUBJECT INDEX

Alloy Steels.—Earle C. Smith. 483 Oct.
Alloys, Silver Brazing.—Robert H. Leach. 489 Oct.
Aluminum Alloys, Age Hardenable, Indium and Other Elements in.—W. H. Fraenkel. 168 Oct.
—, Heat Treating, Radiant Tube Furnace for.—Edward A. Schmeller. 295 Sept.
Analysis, Spectrographic.—Charles C. Nitchie. 509 Oct.
Arc Welding.—C. J. Gallant. 466 Oct.
Atmospheres for Molybdenum High Speed Tool Steels.—A. H. Koch. 458 Oct.

Beryllium As a Light Metal Component.—C. B. Sawyer. 37 July
Bessemer Steels.—H. W. Graham. 442 Oct.
Blackening Steel Parts.—G. W. Pressell. 475 Oct.
Blast Cleaning.—C. A. Snyder. 473 Oct.
Blast Furnace Practice.—Ralph H. Sweetser. 438 Oct.
Bronze-Welding in Repair.—W. S. Walker. 491 Oct.

Calcium in Calcium-Lead Alloys.—Earle E. Schumacher & G. M. Bouton. 865 Dec.
Carbon Steels and Defense Conditions.—H. W. Gillett. 480 Oct.

Carburizing.—E. F. Davis. 462 Oct.
Cast Iron, Machinability of.—C. H. Lorig. 486 Oct.
— and Steel, Hydrogen in.—C. A. Zapffe & C. E. Sims. 56 July
Castings, Copper Base.—John W. Bolton. 447 Oct.
— Die.—Herbert Chase. 493 Oct.
— Light Metal.—Norman E. Woldman. 448 Oct.
— Steel.—C. W. Briggs. 485 Oct.

"Chrom-X" and our Chromium Problem.—Marvin J. Udy. 52 July
Cleaning, Blast.—C. A. Snyder. 473 Oct.
Cold-Drawn Steels.—F. J. Robbins. 487 Oct.
Copper Base Castings.—John W. Bolton. 447 Oct.
Copper and Nickel, Alloyed with Electrolytic Manganese.—B. L. Averbach. 47 July
Cupola Practice.—Donald J. Reese. 445 Oct.

Die Castings.—Herbert Chase. 493 Oct.
Die and Permanent Mold Castings Compared.—Herbert Chase. 153, 698 Aug. Nov.
Dies and Tools, Heat Treatment of.—R. B. Seger. 461 Oct.
Draw-Tools of Carburizing Steel.—L. J. Weber. 454 Oct.
Drop and Upset Forgings. 495 Oct.

Editorials

Side-Blow Converters—July
"Information Please" in Steel—July
Japan and Our Scrap Steel Exports—July
That Expanding Horizon—Aug.
Everything for Defense—Aug.
Our Real Steel Capacity—Aug.
Society Chapters—Aug.
Editorial Expansion—Sept.
After the Emergency—Sept.
Cupolas Duplexed with Open-Hearths—Sept.
Substitutes in the Automobile—Now and After—Sept.
Jobbing Heat-Treating Plants—Sept.
Our Special Issue—Oct.
Once Again—Oct.
Priorities—Oct.
Another Honor for Metals and Alloys—Oct.
Electric Steel—Oct.
Mild Alloy Steels—To Use or Not to Use—Nov.
Aluminum—Nov.
Putting Idle Equipment to Work—Nov.
Isn't the Pendulum Swinging Too Far?—Dec.
Metal Powders.—Dec.
Engineer and Metallurgist—Incorporated.—Dec.
Electric Furnace Top Charging.—G. V. Luerssen. 442 Oct.
Electrolytic Manganese Alloyed with Copper and Nickel (conclusion).—B. L. Averbach. 47 July
— Pickling and Polishing.—Sam Tour. 476 Oct.

Faster Production for Defense

Blast Furnace Practice.—Ralph H. Sweetser. 438 Oct.
Open-Hearth Furnace Output.—Leo F. Reinartz. 438 Oct.
Open-Hearth Steel Making.—E. L. Ramsey. 439 Oct.
Open-Hearth Furnace Control.—C. D. King. 440 Oct.
Bessemer Steels.—H. W. Graham. 442 Oct.

Electric Furnace Top Charging.—G. V. Luerssen. 442 Oct.
Making Steel Castings.—John Howe Hall. 444 Oct.
Gray Iron Foundry Practice.—James T. MacKenzie. 444 Oct.
Cupola Practice.—Donald J. Reese. 445 Oct.
Malleable Iron Castings.—H. A. Schwartz. 446 Oct.
Copper Base Castings.—John W. Bolton. 447 Oct.
Light Metal Castings.—Norman E. Woldman. 448 Oct.

Steel Mill Heating Furnaces.—M. H. Mawhinney. 449 Oct.
Rolling Mills and Auxiliaries.—F. H. Allison, Jr. 450 Oct.
Forging of Shells.—F. G. Schranz. 454 Oct.
Draw-Tools of Carburizing Steel.—L. J. Weber. 454 Oct.
Machining—Old Machines and New Men.—George T. Trundle, Jr. 455 Oct.
Machining with Carbide Tools.—James R. Longwell. 456 Oct.

High Speed Steel Tools.—J. V. Emmons. 457 Oct.
Atmospheres for Molybdenum High Speed Tool Steels.—A. H. Koch. 458 Oct.
Rearmament and Heat Treatment.—E. G. de Coriolis. 459 Oct.
Tool Life.—O. V. Greene. 460 Oct.
Heat Treatment of Tools and Dies.—R. B. Seger. 461 Oct.
Heat Treatment of Parts.—J. F. Wyzalek. 461 Oct.

Carburizing.—E. F. Davis. 462 Oct.
Nitriding.—Horace C. Knerr. 464 Oct.
Oxyacetylene Flame Hardening.—J. J. Crowe. 464 Oct.

Gas Welding.—H. E. Rockefeller. 465 Oct.
Arc Welding.—C. J. Gallant. 466 Oct.
Resistance Welding.—R. T. Gillette. 468 Oct.
Metal Cleaning.—R. W. Mitchell. 470 Oct.
Hot-Dip Galvanizing.—Wallace G. Imhoff. 472 Oct.

Blast Cleaning.—C. A. Snyder. 473 Oct.
Selection of Heat-Treating Furnaces.—A. H. Vaughan. 474 Oct.
Blackening Steel Parts.—G. W. Pressell. 475 Oct.
Electrolytic Pickling and Polishing.—Sam Tour. 476 Oct.

Carbon Steels and Defense Conditions.—H. W. Gillett. 480 Oct.
Role of Plastics.—J. Delmonte. 480 Oct.
Finishes for Metal Products.—H. S. Rawdon. 481 Oct.

Powder Metallurgy.—Fred P. Peters. 482 Oct.
Alloy Steels.—Earle C. Smith. 483 Oct.
Gray Iron in Product Design.—Oliver Smalley. 484 Oct.

Steel Castings.—C. W. Briggs. 485 Oct.
Machinability of Cast Iron.—C. H. Lorig. 486 Oct.

Welding Design.—A. F. Davis. 487 Oct.
Cold-Drawn Steels.—F. J. Robbins. 487 Oct.
Silver Brazing Alloys.—Robert H. Leach. 489 Oct.
Bronze-Welding in Repair.—W. S. Walker. 491 Oct.

Screw Machine Products.—D. H. Montgomery. 492 Oct.
Die Castings.—Herbert Chase. 493 Oct.
Drop and Upset Forgings. 495 Oct.

National Defense Materials.—G. F. Jenks. 498 Oct.
Specifications and Standardization.—Francis G. Jenkins. 500 Oct.

Magnetic Powder Testing.—A. V. de Forest. 501 Oct.
Metallographic Inspection.—Tracy C. Jarrett. 503 Oct.

Welding-Quality Steel.—S. L. Hoyt & C. B. Voldrich. 504 Oct.
Instrumentation.—C. O. Fairchild. 507 Oct.
Mass Radiographic Inspection.—Robert C. Woods. 508 Oct.

Spectrographic Analysis.—Charles C. Nitchie. 509 Oct.

Finishes for Metal Products.—H. S. Rawdon. 481 Oct.
Forging of Shells.—F. G. Schranz. 454 Oct.
Forgings, Drop and Upset. 495 Oct.
Foundry Practice, Gray Iron—James T. MacKenzie. 444 Oct.
Galvanizing, Hot-Dip.—Wallace G. Imhoff. 472 Oct.
Gas Welding.—H. E. Rockefeller. 465 Oct.

Gray Iron Foundry Practice.—James T. McKenzie. 444 Oct.
— in Product Design.—Oliver Smalley. 484 Oct.

Hadfield Manganese Steel—Another Approach to Its Qualities and Use.—V. R. Farlow & L. H. McCreery. 692 Nov.

Heat-Treating Furnaces, Selection of.—A. H. Vaughan. 474 Oct.

Heat Treatment of Parts.—J. F. Wyzalek. 461 Oct.

— and Rearmament.—E. G. de Coriolis. 459 Oct.

— of Tools and Dies. R. B. Seger. 461 Oct.

Heating Furnaces, Steel Mill.—M. H. Mawhinney. 449 Oct.

High Speed Steel Tools.—J. V. Emmons. 457 Oct.

Highlights in Making Gold Filled Metal for Spectacles.—W. J. Wrighton. 868 Dec.

Hot-Dip Galvanizing.—Wallace G. Imhoff. 472 Oct.

Hydrogen in Steel and Cast Iron (conclusion).—C. A. Zapffe & C. E. Sims. 56 July

Indium and Other Elements in Age Hardenable Aluminum Alloys.—W. H. Fraenkel. 168 Aug.

— Recovery of, from Waste Liquors. 60 July

Induction Heating—Tractor Parts Rapidly Hardened by Induction.—Edwin F. Cone. 687 Nov.

— in War Production.—Frank T. Chesnut. 851 Dec.

Instrumentation.—C. O. Fairchild. 507 Oct.

Iron, Malleable, Castings.—H. A. Schwartz. 446 Oct.

Lead-Calcium Alloys, Calcium in.—Earle E. Schumacher & G. M. Bouton. 865 Dec.

Letters to the Editor

Conventions in Canada. 172 Aug.
One Good Way to Save Aluminum. 182 Aug.
Zinc and Aluminum Die Castings. 184 Aug.
Our Real Steel Capacity. 325 Sept.
Problems in Transient Heat Flow. 325 Sept.
Forgings vs. Welded Assemblies. 326 Sept.
Practical Metallography of the Stainless Steels. 510 Oct.

Mild Alloy Steels. 876 Dec.

Light Metal Castings.—Norman E. Woldman. 448 Oct.

— Component, Beryllium as a.—C. B. Sawyer. 37 July

Low Alloy Steel Castings from Available Raw Materials.—C. H. Lorig. 712 Nov.

Machinability of Cast Iron.—C. H. Lorig. 486 Oct.

Machining.—Old Machines and New Men.—George T. Trundle, Jr. 455 Oct.

— with Carbide Tools.—James R. Longwell. 456 Oct.

Magnetic Powder Testing.—A. V. de Forest. 501 Oct.

Making Steel Castings.—John Howe Hall. 444 Oct.

Malleable Iron Castings.—H. A. Schwartz. 446 Oct.

Manganese Steel, Hadfield—Another Approach to Its Qualities and Use.—V. R. Farlow & L. H. McCreery. 692 Nov.

Mass Radiographic Inspection.—Robert C. Woods. 508 Oct.

Metal Cleaning.—R. W. Mitchell. 470 Oct.

— Products, Finishes for.—H. S. Rawdon. 481 Oct.

— Shortages and Plastics.—Herbert Chase. 310 Sept.

Metallographic Inspection.—Tracy C. Jarrett. 503 Oct.

Modern Shell Forging Methods.—F. G. Schranz. 301 Sept.

National Defense Materials.—G. F. Jenks. 498 Oct.

Nickel and Copper, Alloyed with Electrolytic Manganese.—B. L. Averbach. 47 July

Nitriding.—Horace C. Knerr. 464 Oct.

Open-Hearth Furnace Control.—C. D. King. 440 Oct.

— Furnace Output.—Leo F. Reinartz. 438 Oct.

— Problems—1941.—Frank G. Norris. 856 Dec.

— Steel Making.—E. L. Ramsey. 439 Oct.

The Output of Steel Castings.—Edwin F. Cone. 316 Sept.

Oxyacetylene Flame Hardening.—J. J. Crowe. 464 Oct.
 Permanent Mold and Die Castings Compared.—Herbert Chase. 153, 698 Aug., Nov.
 Pickling and Polishing, Electrolytic.—Sam Tour. 476 Oct.
 Pig Iron, "Silvery," Production of.—A Pictorial Presentation. 40 July
 Pipe, Butt-Welded, Producing Continuous.—L. J. Hess. 31 July
 Plastics and Metal Shortages.—Herbert Chase. 310 Sept.
 ————Role of.—J. Delmonte. 480 Oct.
 Polishing and Pickling, Electrolytic.—Sam Tour. 476 Oct.
 Powder Metallurgy.—Fred P. Peters. 482 Oct.
 ————1941 Model (Report of M. I. T. conference)—Fred P. Peters. 721 Nov.
 ————Sintered Metals in Friction Devices.—Edwin F. Cone. 843 Dec.
 Precipitation Hardening Effects in "Plain" Ferritic Steels (Cor. Abs.)—H. W. Gillett. 161 Aug.
 Producing Continuous Butt-Welded Pipe.—L. J. Hess. 31 July
 Product Design, Gray Iron in.—Oliver Smalley. 484 Oct.
 Production of "Silvery Pig Iron"—A Pictorial Presentation. 40 July
 Radiant Tube Furnace for Heat Treating Aluminum Alloys.—Edward A. Schmeller. 295 Sept.
 Radiographic Inspection, Mass.—Robert C. Woods. 508 Oct.
 Radium Containers of High Density Metallic Aggregates.—Herman F. Kaiser. 170 Aug.
 Rearmament and Heat Treatment.—E. G. de Coriolis. 459 Oct.
 Recovery of Indium from Waste Liquors. 60 July
 Resistance Welding.—R. T. Gillette. 468 Oct.
 Role of Plastics.—J. Delmonte. 480 Oct.
 Rolling Mills and Auxiliaries.—F. H. Allison, Jr. 450 Oct.

Screw Machine Products.—D. H. Montgomery. 492 Oct.
 Selection of Heat-Treating Furnaces.—A. H. Vaughan. 474 Oct.
 Shell Forging Methods, Modern.—F. G. Schranz. 301 Oct.
 Shells, Forging of.—F. G. Schranz. 454 Oct.
 Silver Brazing Alloys.—Robert H. Leach. 489 Oct.
 Sintered Metals in Friction Devices.—Edwin F. Cone. 843 Dec.
 Solders, Substitute.—F. N. Rhines & W. A. Anderson. 704 Nov.
 Some Creep Properties of 16 Cr-13 Ni-3 Per Cent Mo Steel.—H. D. Newell. 173 Aug.
 Some Open-Hearth Problems—1941.—Frank G. Norris. 856 Dec.
 Specifications and Standardization.—Francis G. Jenkins. 500 Oct.
 Spectacles, Gold Filled Metal for, Highlights in Making.—W. J. Wrighton. 868 Dec.
 Spectrographic Analysis.—Charles C. Nitchie. 509 Oct.
 Standardization, and Specifications.—Francis G. Jenkins. 500 Oct.
 Steel, Carburizing, Draw-Tools of.—L. J. Weber. 454 Oct.
 ————and Cast Iron, Hydrogen in.—C. A. Zapffe & C. E. Sims. 56 July
 ————Castings.—C. W. Briggs. 485 Oct.
 ————Low Alloy, from Available Raw Materials.—C. H. Lorig. 712 Nov.
 ————Making.—John Howe Hall. 444 Oct.
 ————The Output of.—Edwin F. Cone. 316 Sept.
 ————Heat Resisting—Some Creep Properties of 16 Cr-13 Ni-3 Per Cent Mo Steel.—H. D. Newell. 173 Aug.
 ————Making, Open-Hearth.—E. L. Ramsey. 439 Oct.
 ————Mill Heating Furnaces.—M. H. Mawhinney. 449 Oct.
 ————Parts, Blackening.—G. W. Pressell. 475 Oct.
 ————Welding-Quality.—S. L. Hoyt & C. B. Voldrich. 504 Oct.

Steels, Alloy.—Earle C. Smith. 483 Oct.
 ————Bessemer.—H. W. Graham. 442 Oct.
 ————Carbon, and Defense Conditions.—H. W. Gillett. 480 Oct.
 ————Transformation Structures of Some. 318 Sept.
 ————Cold-Drawn.—F. J. Robbins. 487 Oct.
 ————"Plain" Ferritic, Precipitation Hardening Effects in (Cor. Abs.)—H. W. Gillett. 161 Aug.
 Substitute Solders.—F. N. Rhines & W. A. Anderson. 704 Nov.
 Tempering Air-Hardened Tool Steel.—W. Hughes White. 166 Aug.
 Testing, Magnetic Powder.—A. V. de Forest. 501 Oct.
 Tool Life.—O. V. Greene. 460 Oct.
 Tool Steel, Tempering Air-Hardened.—W. Hughes White. 166 Aug.
 ————Steels, High Speed, Molybdenum, Atmospheres for.—A. H. Koch. 458 Oct.
 Tools, Carbide, Machining with.—James R. Longwell. 456 Oct.
 ————and Dies, Heat Treatment of.—R. B. Seger. 461 Oct.
 ————High Speed Steel.—J. V. Emmons. 457 Oct.
 Tractor Parts Rapidly Hardened by Induction.—Edwin F. Cone. 687 Nov.
 Transformation Structures of Some Forty Carbon Steels. 318 Sept.
 War Production, Induction Heating in.—Frank T. Chesnut. 851 Dec.
 Welding, Arc.—C. J. Gallant. 466 Oct.
 ————Bronze, in Repair.—W. S. Walker. 491 Oct.
 ————Design.—A. F. Davis. 487 Oct.
 ————Gas.—H. E. Rockefeller. 465 Oct.
 ————Quality Steel.—S. L. Hoyt & C. B. Voldrich. 504 Oct.
 ————Resistance.—R. T. Gillette. 468 Oct.

AUTHOR INDEX

Allison, F. H., Jr.—Rolling Mills and Auxiliaries. 450 Oct.
 Anderson, W. A. & Rhines, F. N.—Substitute Solders. 704 Nov.
 Averbach, B. L.—Electrolytic Manganese Alloyed with Copper and Nickel (conclusion). 47 July
 Bolton, John W.—Copper Base Castings. 447 Oct.
 Bouton, G. M. & Schumacher, Earle E.—Calcium in Calcium-Lead Alloys. 865 Dec.
 Briggs, C. W.—Steel Castings. 485 Oct.
 Chase, Herbert—Die Castings. 493 Oct.
 ————Permanent Mold and Die Castings Compared. 153, 698 Aug., Nov.
 ————Plastics and Metal Shortages. 310 Sept.
 Chesnut, Frank T.—Induction Heating in War Production. 851 Dec.
 Cone, Edwin F.—The Output of Steel Castings. 316 Sept.
 ————Sintered Metals in Friction Devices. 843 Dec.
 ————Tractor Parts Rapidly Hardened by Induction. 687 Nov.
 Crowe, J. J.—Oxyacetylene Flame Hardening. 464 Oct.
 Davis, A. F.—Welding Design. 487 Oct.
 Davis, E. F.—Carburizing. 462 Oct.
 de Coriolis, E. G.—Rearmament and Heat Treatment. 459 Oct.
 de Forest, A. V.—Magnetic Powder Testing. 501 Oct.
 Delmonte, J.—Role of Plastics. 480 Oct.
 Emmons, J. V.—High Speed Steel Tools. 457 Oct.
 Fairchild, C. O.—Instrumentation. 507 Oct.
 Farlow, V. R. & McCreery, L. H.—Hadfield Manganese Steel—Another Approach to Its Qualities and Use. 692 Nov.
 Fraenkel, W. H.—Indium and Other Elements in Age Hardenable Aluminum Alloys. 168 Aug.
 Gallant, C. J.—Arc Welding. 466 Oct.
 Gillett, H. W.—Carbon Steels and Defense Conditions. 480 Oct.
 ————Precipitation Hardening Effects in "Plain" Ferritic Steels (Cor. Abs.) 161 Aug.
 Gillette, R. T.—Resistance Welding. 468 Oct.
 Graham, H. W.—Bessemer Steels. 442 Oct.
 Greene, O. V.—Tool Life. 460 Oct.
 Hall, John Howe—Making Steel Castings. 444 Oct.

Hess, L. J.—Producing Continuous Butt-Welded Pipe. 31 July
 Hoyt, S. L. & Voldrich, C. B.—Welding-Quality Steel. 504 Oct.
 Imhoff, Wallace G.—Hot-Dip Galvanizing. 472 Oct.
 Jarrett, Tracy C.—Metallographic Inspection. 503 Oct.
 Jenkins, Francis G.—Specifications and Standardization. 500 Oct.
 Jenks, G. F.—National Defense Materials. 498 Oct.
 Kaiser, Herman F.—Radium Containers of High Density Metallic Aggregates. 170 Aug.
 King, C. D.—Open-Hearth Furnace Control. 440 Oct.
 Knerr, Horace C.—Nitriding. 464 Oct.
 Koch, A. H.—Atmospheres for Molybdenum High Speed Tool Steels. 458 Oct.
 Leach, Robert H.—Silver Brazing Alloys. 489 Oct.
 Longwell, James R.—Machining with Carbide Tools. 456 Oct.
 Lorig, C. H.—Low Alloy Steel Castings from Available Raw Materials. 712 Nov.
 ————Machinability of Cast Iron. 486 Oct.
 Luerssen, G. V.—Electric Furnace Top Charging. 442 Oct.
 MacKenzie, James T.—Gray Iron Foundry Practice. 444 Oct.
 Mawhinney, M. H.—Steel Mill Heating Furnaces. 449 Oct.
 McCreery, L. H. & Farlow, V. R.—Hadfield Manganese Steel—Another Approach to Its Qualities and Use. 692 Nov.
 Mitchell, R. W.—Metal Clearing. 470 Oct.
 Montgomery, D. H.—Screw Machine Products. 492 Oct.
 Newell, H. D.—Some Creep Properties of 16 Cr-13 Ni-3 Per Cent Mo Steel. 173 Aug.
 Nitchie, Charles C.—Spectrographic Analysis. 509 Oct.
 Norris, Frank G.—Some Open-Hearth Problems—1941. 856 Dec.
 Peters, Fred P.—Powder Metallurgy. 482 Oct.
 ————Powder Metallurgy—1941 Model (Report of M. I. T. conference) 721 Nov.
 Pressell, G. W.—Blackening Steel Parts. 475 Oct.
 Ramsey, E. L.—Open-Hearth Steel Making. 439 Oct.
 Rawdon, H. S.—Finishes for Metal Products. 481 Oct.
 Reese, Donald J.—Cupola Practice. 445 Oct.

Reinartz, Leo F.—Open-Hearth Furnace Output. 438 Oct.
 Rhines, F. N. & Anderson, W. A.—Substitute Solders. 704 Nov.
 Robbins, F. J.—Cold-Drawn Steels. 487 Oct.
 Rockefeller, H. E.—Gas Welding. 465 Oct.
 Sawyer, C. B.—Beryllium As a Light Metal Component. 37 July
 Schmeller, Edward A.—Radiant Tube Furnace for Heat Treating Aluminum Alloys. 295 Sept.
 Schranz, F. G.—Forging of Shells. 454 Oct.
 ————Modern Shell Forging Methods. 301 Sept.
 Schumacher, Earle E. & Bouton, G. M.—Calcium in Calcium-Lead Alloys. 865 Dec.
 Schwartz, H. A.—Malleable Iron Castings. 446 Oct.
 Seger, R. B.—Heat Treatment of Tools and Dies. 461 Oct.
 Sims, C. E. & Zapffe, C. A.—Hydrogen in Steel and Cast Iron (conclusion). 56 July
 Smalley, Oliver—Gray Iron in Product Design. 484 Oct.
 Smith, Earle C.—Alloy Steels. 483 Oct.
 Snyder, C. A.—Blast Cleaning. 473 Oct.
 Sweetser, Ralph H.—Blast Furnace Practice. 438 Oct.
 Tour, Sam—Electrolytic Pickling and Polishing. 476 Oct.
 Trundle, George T., Jr.—Machining—Old Machines and New Men. 455 Oct.
 Udy, Marvin J.—"Chrom-X" and our Chromium Problem. 52 July
 Vaughan, A. H.—Selection of Heat-Treating Furnaces. 474 Oct.
 Voldrich, C. B. & Hoyt, S. L.—Welding-Quality Steel. 504 Oct.
 Walker, W. S.—Bronze-Welding in Repair. 491 Oct.
 Weber, L. J.—Draw-Tools of Carburizing Steel. 454 Oct.
 White, W. Hughes—Tempering Air-Hardened Tool Steel. 166 Aug.
 Wildman, Norman E.—Light Metal Castings. 448 Oct.
 Woods, Robert C.—Mass Radiographic Inspection. 508 Oct.
 Wrighton, W. J.—Highlights in Making Gold Filled Metal for Spectacles. 868 Dec.
 Wyzalek, J. F.—Heat Treatment of Parts. 461 Oct.
 Zapffe, C. A. & Sims, C. E.—Hydrogen in Steel and Cast Iron (conclusion). 56 July